

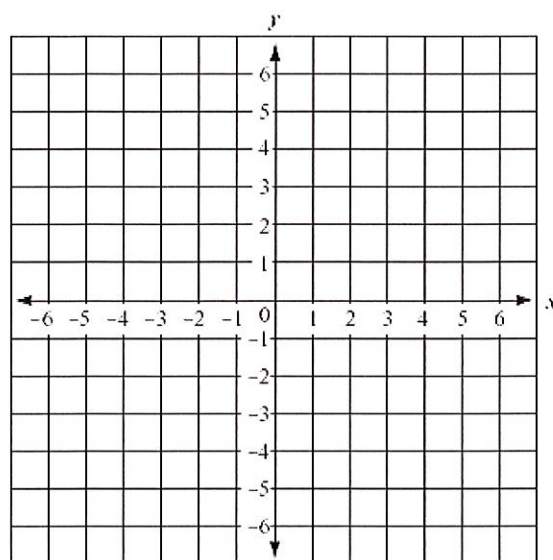
Name: _____

1. Graph the line with equation $y = 2x - 5$

What is the slope of the line?

What are the coordinates of the y-intercept?

What are the coordinates of the x-intercept?



2. A line contains two points $P(-1, 10)$ and $T(4, -5)$.

a. Determine an equation of the line in slope intercept form.

b. What is the y-coordinate at the point where the x-coordinate is $x = -20$

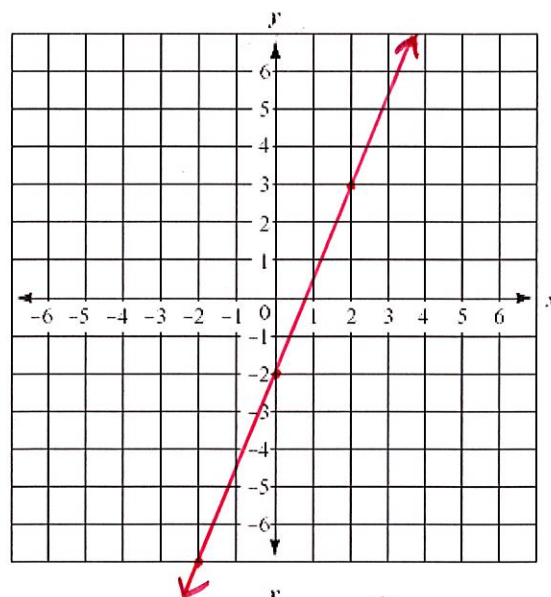
3. Solve the literal equation $C = Ax + By$ for A

4. Convert each equation from slope-intercept form to standard form or vice versa:

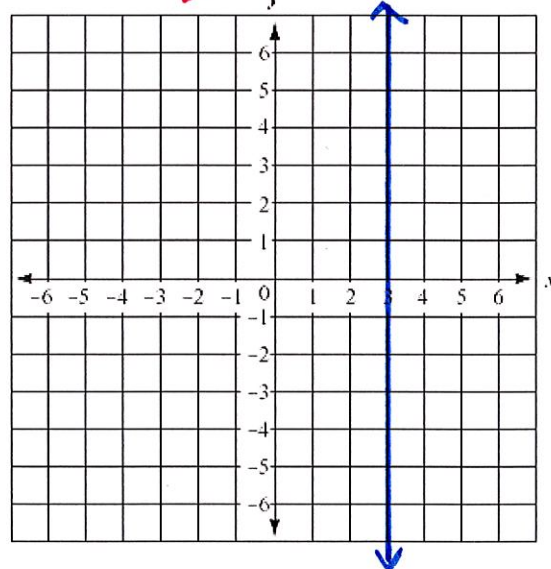
a. $6x - y = -5$

b. $y = \frac{-2}{3}x + 4$

5. Write an equation of the line shown in slope- intercept form.



6. Write an equation of the line shown in slope- intercept form.



What is the slope of the line?

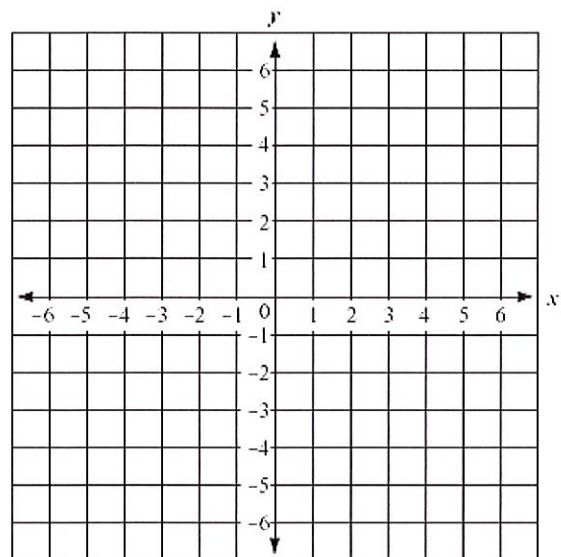
What is the y-intercept of the line?

7. Find an equation of the line with slope $m = \frac{3}{5}$ and point $A(0, -2)$
8. Kayla gets in her cab and notices the initial up-front fee on the meter. After 2 minutes, the meter reads \$6.50, and after 6 minutes, the meter reads \$12.50.
- What is the rate of change in this scenario? Include the proper units.
 - What is an equation or rule or formula that gives the cab fare as a function of time?
 - How much will a 20-minute cab ride cost?

9. Solve the literal equation $\frac{x^2 + gh}{y} = k$ for g .

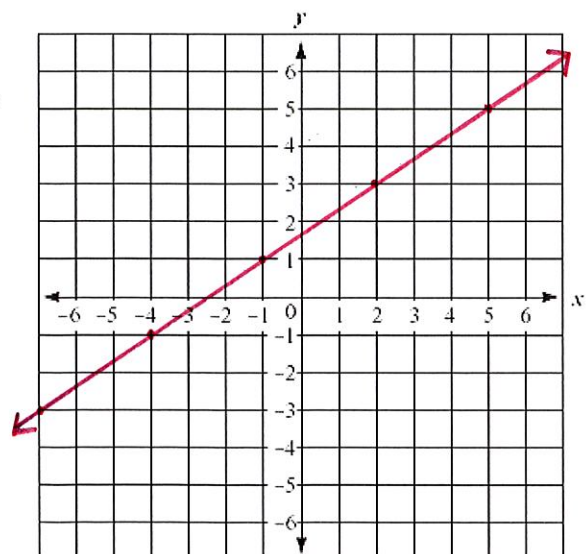
10. Solve the system of two equations by graphing.
State the coordinates of the intersection point.

$$y = 2 \quad \& \quad y = \frac{-1}{3}x + 1$$



11. Determine an equation of the line that contains the point $P(-4, 5)$ and is parallel to the line with equation $-3x + 2y = -8$.

12. Determine an equation of the line that contains the point $P(2, -1)$ and is perpendicular to the line shown.



13. Determine which tables contain data representing a proportional relationship. Write “yes” or “no” below each table. If “yes”, write an equation representing the proportional relationship.

a.

x	y
-3	12
-1	4
0	0
2	-8
4	-16

b.

X	y
2	3
4	7
6	11
9	17
10	19

c.

x	y
0	0
1	1
2	4
3	9
4	16

d.

x	y
-3	-2
3	2
6	4
9	6
12	8

14. Write a rule or equation or formula for the linear sequence $-14, -6, 2, 10, 18, \dots$

15. A water pump can remove water from a pool at a constant rate. 75 gallons are removed in 5 minutes and 165 gallons are removed in 11 minutes.

- What is the rate in gallons per minute at which the water is being pumped out of the pool?
- Write a rule or equation or formula that represents the amount of water being pumped out as a function of time.
- How many gallons are pumped out after one hour?

16. Solve the system of two equations by graphing.

$$x + y = 0 \quad \& \quad y - \frac{4}{3}x = 6$$

